1.5 New developments in Chinese oil shale activities

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In 2010, Fushun Coal Mining Co., Liaoning Province, will produce 350,000 tons of shale oil using 220 Fushun-type retorts. Each retort has the capacity to process 100 tons of oil shale per day (TPD). An ATP retort was constructed and will be put into trial operation by the end of the year. The ATP retort has an oil shale capacity of 6,000 TPD. There are several shale oil facilities now online, including Longkou (Shandong province, 60,000 tons of shale oil per year, TPY), Huadian (Jilin province, 50,000 TPY), Wangqing (Jilin Province, 50,000 TPY), Beipiao (Inner Mongolia, 30,000 TPY), and Lingyuan (Liaoning province, 20,000 TPY). Altogether China now has around 330 Fushun-type retorts with a combined shale oil production capacity of 550,000 TPY. In Huadian, the Hongsheng Energy Company has finished construction of 12 modified Fushun-type retorts, each with the capacity to process 300 TPD of oil shale. The plant was operating successfully as of the end of June. This retort has two sections; the upper section is a cylinder, similar to the Fushun-retort, for oil shale processing and the lower section is square and is used for semi-coke cooling. In Yaojie, Gansu province, the Gansu Coal Mining company, cooperating with the Sanjiang Coal Chemical Company, has constructed 8 oil shale retorts. These are square retorts, each with a capacity to process oil shale at a rate of 600 TPD. The plant was operating successfully as of the end of June. The China National Petroleum Company (CNPC), cooperating with the Dalian University of Technology, is constructing a particulate oil shale retort with an oil shale processing capacity of 2,000 TPD. Plant construction will be completed and operations begun in 2011. The Harbin Coal Chemical Company in Heilongjiang province has finished a fluidized bed oil shale retorting test reactor with an oil shale processing capacity of 50 TPD. A feasibility study has been completed for a plant where this technology will be implemented on an industrial scale with an oil shale processing capacity of 2,000 TPD. Finally, in June 2010 the China Petrochemical Press published a book in English titled "Oil Shale-Petroleum Alternative" with chief editor Professor Jialin Qian and deputy editors Professors Jianqiu Wang and Shuyuan Li (to order, contact CPC using this email address: ytt@sinopec.com).